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APPLICATION NO.	O. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,349	10/728,349 12/04/2003		Philip J. Ellerbrock	038190/270534	8600
826	7590	11/09/2005	EXAMINER		
ALSTON			DANG, KHANH		
BANK OF 101 SOUT		A PLAZA STREET, SUITE 400	ART UNIT	PAPER NUMBER	
CHARLOTTE, NC 28280-4000				2111	
				DATE MAILED: 11/09/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No. Applicant(s)					
Interview Summary	10/728,349	ELLERBROCK ET AL.				
interview dummary	Examiner	Art Unit				
	Khanh Dang	2111				
All participants (applicant, applicant's representative, PTO	personnel):					
(1) <u>Khanh Dang</u> .	(3)					
(2) Mr. Ransom (Atty. of Record).	(4)					
Date of Interview: <u>03 November 2005</u> .						
Type: a)⊠ Telephonic b)□ Video Conference c)□ Personal [copy given to: 1)□ applicant 2	²)☐ applicant's representative	·)				
Exhibit shown or demonstration conducted: d) Yes If Yes, brief description:	e)⊠ No.					
Claim(s) discussed: <u>1</u> .						
Identification of prior art discussed: Karolys and Hanna.						
Agreement with respect to the claims f) was reached. g	)□ was not reached. h)⊠ N	I/A.				
Substance of Interview including description of the general reached, or any other comments: <u>See Continuation Sheet</u> .	nature of what was agreed to	if an agreement was				
(A fuller description, if necessary, and a copy of the amendallowable, if available, must be attached. Also, where no coallowable is available, a summary thereof must be attached	opy of the amendments that w					
THE FORMAL WRITTEN REPLY TO THE LAST OFFICE A INTERVIEW. (See MPEP Section 713.04). If a reply to the GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF Summary of Record of Interview requirements on reverse signs.	last Office action has already THE MAILING DATE OF THIS OF THE SUBSTANCE OF TH	been filed, APPLICANT IS S INTERVIEW SUMMARY				
	Knan 6	ons				
		h Dang Examiner				
Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.	Examiner's sign	ature, if required				

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Mr. Ransom argues, in view of the proposed amendment to claim 1, that claim 1 is not directed to a clock recovery system. Instead, claim 1 is directed to the use of multiple bit rates and automatic switching from one bit rate to another bit rate depending on the bit rate used by a message presented to a receiver. Mr. Ransom also agrees with the Examiner to change the word "possible" (lines 7 and 12 of claim 1) to -- predetermined -- to further define the claim. The Examiner agrees with Mr. Ransom that the proposed amendmens to claim 1 should overcome the current rejections. Mr. Ransom will file an RCE so that the proposed amendments can be entered.

On a side note, the Examiner would like to thank Mr. Ransom for his effort and cooperation to advance prosecution of this application by discussing in length, on behalf of the Applicants, the issues related to the rejections with the Examiner during the 11/03/05 Interview, and proposing amendments to the claim.

Applicant Initiated Interview Request Form				
In re: Ellerbrock et al Appl. Nos.: 10/727,414, 10/729,560, 10/728,349 Group Art Unit: 3654 Filed: December 4, 2003 Examiner: K. Dang For: NETWORK DEVICE INTERFACE FOR DIGITALLYINTERFACING DATA CHANNELS TO A CONTROLLER VIA A NETWORK				
Status of Application: Final Rejection				
Tentative Participants: (1) Examiner Dang (2) Kevin Ransom				
Proposed Date and Time of Interview: November 3, 2005; 2:00 pm				
Type of Interview Requested: (1) Telephonic (2) Personal (3) Video Conference				
Exhibit To Be Shown or Demonstrated: YES NO If yes, provide brief description:				
Issues To Be Discussed				
Rejections of application nos. 10/727,414, 10/729,560, 10/728,349				
Brief Description of Arguments to be Presented:				
Please see attached documents				
An interview was conducted on the above-identified application on				
NOTE: This form should be completed by applicant and submitted to the examiner in advance of the interview (so MPEP § 713.01).  This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR1.133(b)) as soon as possible.				
(Applicant's Representative Signature) (Examiner/SPE Signature)				

Appl. No.:
Applicant(s):

10/728,349

Ellerbrock et al.

Filed:

December 4, 2003

Art Unit:

2111

Examiner:

K. Dang

Title:

NETWORK DEVICE INTERFACE FOR DIGITALLY NTERFACING

Confirmation No.: 8600

DATA CHANNELS TO A CONTROLLER VIA NETWORK

Docket No.:

038190/270534

## Proposed Amendment:

1. (proposed amended) A method for communicating between a bus controller and at least one data channel via a common digital bus, the method comprising:

communicating between a bus controller and at least one data channel using a first predetermined bit rate;

transmitting a first message from the bus controller to the at least one data channel at a predetermined second bit rate, wherein the predetermined second bit rate is selected from a plurality of possible bit rates that may be used to communicate on the common digital bus;

receiving the first message at the at least one data channel;

analyzing the first message at each of the plurality of possible bit rates upon receipt of the first message by the at least one data channel;

determining from the plurality of possible bil rates that the first message is being transmitted at the second predetermined bit rate at which the first message was transmitted upon receipt of the first message by the at least one data channel, where the determination is made independent of a synchronous clock signal from the bus controller; and

transmitting a second message from the at least one data channel to the bus controller in response to the first message at the <u>second</u> same predetermined bit rate.

## Remarks:

Applicant respectfully submits that the Office Action is overlooking a major difference between the claimed invention and the prior art. The Office Action mistakes the claimed invention for a clock recovery system. The present invention is not a clock recovery system. Instead, the claimed invention is directed to an automatic clock rate detection system for a finite number of desirable clock rates. What is considered novel is that claimed invention is a mechanism that automatically switches to another predetermined bus rate when messaging using another bus rate is presented to the receiver.

It should be noted that neither Karolys nor Hanna discloses an automatic detection of multiple bit rates of significant difference (most likely 1000s of percent). Hanna's patent presents a Manchester decoding technique that does not require a PLL nor an asynchronous oversampling receiver to recover a standard 20 bit-time message of a known bit rate within a certain acceptance tolerance (mentioned to be about 10%). Karolys teaches about a bus that connects sensors to a host using a serially multiplexed digital communication bus. Nowhere does Hanna discuss multiple bit rates nor does Karolys cover the idea of bus speeds or bus rate selection, much less a system that is capable of communicating at different bit rates and a mechanism for determining which of the bit rates has been selected for communication.

CLT01/4762166v1